THE VETERINARY RECORD

A Weekly Journal for the Profession.

EDITED BY WILLIAM HUNTING, F.R.C.V.S.

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EDITORIAL NOTES.

Last year the Council voted a sum of money to enable a committee to put the Museum at Red Lion Square in order. The committee—chiefly through its President, Professor Axe—made considerable alterations and improvements. Only more good specimens are required to make our museum presentable. The difficulty of properly preserving many specimens is no doubt one good reason why practitioners fail to contribute as largely as they might to our collection, but there are many dry specimens which might well be forwarded to the Secretary, or better still to Professor Axe, who is continuing his valuable aid to the Museum of the College. Of course it would be necessary to write the Professor and state distinctly that what was sent was intended not for the School but for the College,

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The Library of the Royal College of Veterinary Surgeons is about in the same condition now as was the museum a year ago. It wants thoroughly overhauling. It contains many books of value together with not a little rubbish. This library might be most useful for purposes of reference but it is simply wasted. No printed catalogue exists, no arrangement of the works on the shelves is attempted, and as to any classification of the books—such a piece of work has never been thought of. To appoint a committee would be of little use unless the Council permitted that body to employ and pay a fit person to arrange, classify and catalogue all the books. Probably more shelves would be required, many volumes would need binding, and perhaps it would be found necessary to lay out £50 in purchasing books the absence of which is a crying disgrace. Our Council has a Dinner Committee but no Library Committee!

In answer to the question—how is it that the patent medicine with its long-winded pretensions and lying self-praise exercises such a fascination on the public? a lay newspaper replies "How to account for it we know not, except that it is human nature to believe in miracles and attach faith to the marvellous." We believe this rather wide assertion embraces the whole truth, but the answer may perhaps be stated a little more precisely. The credulous human being swallows many things as strange as quack medicines but there is always some other motive. The Sporting column of the daily papers or the oracular whispers of a drunken stableman only lead fools to back horses because they expect to win money more easily than by working for it. The simple faith which enables the empirics of theology to wield their fearful power requires not only love of the marvellous but a very lively appreciation of after-rewards. The individual who swallows patent medicines hopes to cure his trouble and possibly save the doctor's charges. The mystery of "something in a bottle" does not trouble him much. He is not afraid of it, because he knows others have swallowed it and lived. His whole and sole knowledge of the practice of medicine is Mystery. The licensed practitioner has taught him that the art and science is a mystery. If he gets his medicine from the orthodox and diploma'd one it is carefully coloured and flavoured. If he has a prescription written for him it is in a dead language so abbreviated as to be unreadable except to the initiated. The very weights and measures are expressed by antiquated signs, and the mysterious document commences with a hieroglyphic, and ends usually with an illegible scrawl. Since the birth of medicine even to the present day mystery and deception have been practised upon the patients. The public has been taught not to expect common sense explanations from its doctors, but dogmatic opinions couched in hazy phrases; it has been taught that medicines are all-powerful, that without them diseases cannot be driven out; it has, in short, been taught to accept "something in a bottle" as the only right and proper means towards combating disease.

The rampant quackery of the present day is the natural sequence to the mystery and deception practised for centuries by the "medicine man," the barber-surgeon and the courtly physician. When the public obtain some elementary notions of physiology, when they appreciate that disease is only structural or functional change, and not some spiritual or material substance to be washed out or neutralised by drugs, then, possibly we shall find that lying quacks will cease their trade or be prosecuted for obtaining money under false pretences. The fortune-teller was believed in once, then was laughed at, and now is prosecuted. The drug compounder will go through similar stages and be superseded by a rational pharmacist.

CASES AND ARTICLES.

FRACTURE OF THE TRACHEA,

By John E. Miller, M.R.C.V.S., Keyingham.

As the publication of rare cases is always interesting and may be instructive I shall relate one which came under my notice when with Mr. Smith, of Sunderland. I was called early in the morning to see a cart mare which had been left the night before in its stable apparently in perfect health. I found the animal with head depressed, respiration hurried, nostrils dilated and a 'blowing' sound emitted at each breath. There was evidently some mechanical obstruction to the breathing which was causing the 'noise' and the respiratory disturbance, but there was not the rather frequent one of parotideal abscess. On more minute examination I found a depression in the trachea, and could detect through the unbroken skin irregular projections of the cartilaginous rings. On pressing these I could vary the sound of the breathing and add to the animal's distress, which confirmed my diagnosis of fracture.

A tracheotomy tube was inserted below the injured part and immediate relief given to the breathing. The tube was taken out daily and cleansed in an antiseptic solution. The swelling at the injured part subsided, and in a short time the broken rings of the trachea sufficiently resumed their normal form to cause no interference with respiration. The tube was then removed and the wound allowed to heal.

I may just add that no direct cause of the injury was ever discovered, nor was anything in the stable found disturbed on the night of the accident.

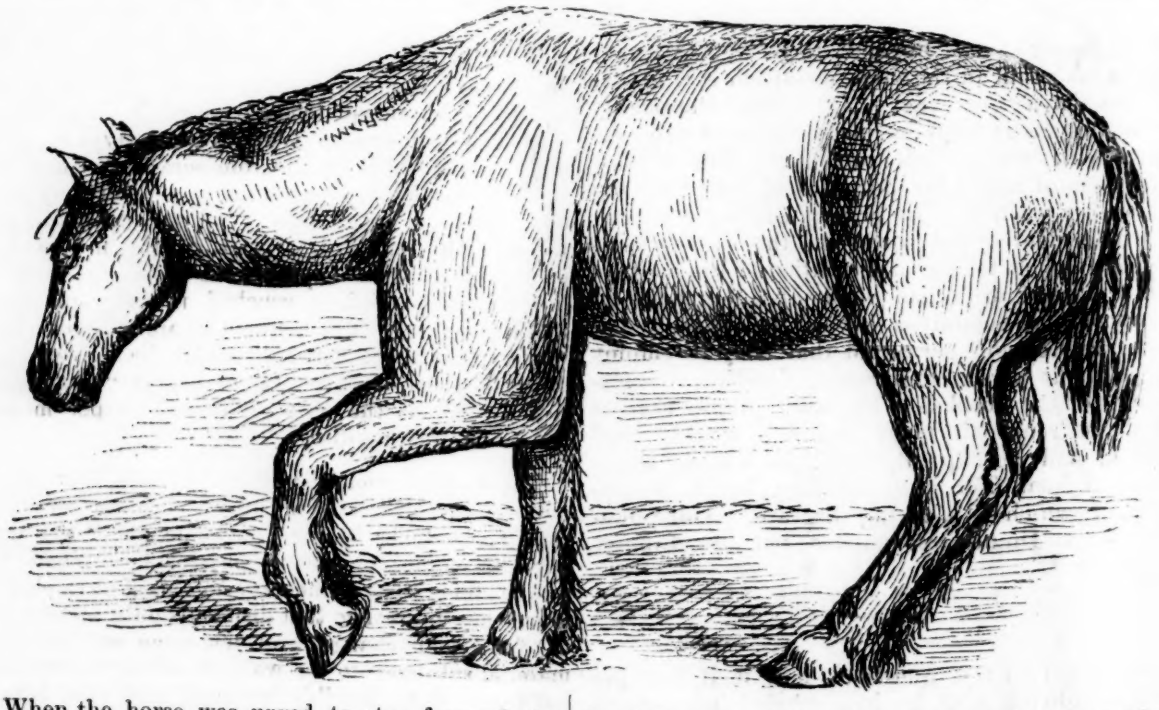
FRACTURE OF THE FIRST STERNAL RIBS OF THE HORSE.

By M. G. Byerley, M.R.C.V.S.

As fracture of the first sternal ribs of the horse is so seldom met with, a few remarks on a case of this description may not prove uninteresting.

Some time since, an aged brown cart-horse came under treatment suffering from severe lameness of the near fore limb, caused by a fall on an asphalted road rendered greasy by a slight shower.

If reference is made to Fig. 1, which represents the appearance presented by the animal after the accident, it will be noticed that the limb was kept in a semi-flexed position, the toe being the only part of the foot brought to the ground; also, that the elbow hung down to a considerable extent, in fact, the whole member seemed to have slipped downwards. The neck was curved towards the left side.



When the horse was urged to step forward the fore legs bent under him, he having, at the same time, great difficulty in avoiding falling on his knees.

Neither extension nor flexion of the limb drew forth any expression of pain from the animal. If pressure were applied to the shoulder-joint, so as to operate in a direction running obliquely with that of the humerus, a little uneasiness was evinced; but no such state of affairs obtained when the olecranon was forced forward.

If the limb were straightened to resemble the position assumed in a natural standing posture, it re-acquired the semi-flexed state directly the support afforded by the examiner was withdrawn; and this

movement was performed somewhat automatically, the member springing forward with a jerk, without any apparent guiding influence of the will. No crepitus could be discovered on manipulation.

It may be mentioned that sometimes the head was rested against the left shin. Sometimes the horse lowered his head, leant to the near side until he nearly over-balanced himself, and then reverted to the more upright posture. Moreover, at rare intervals, a rather novel performance was gone through. This consisted in first allowing the body to fall downwards and backwards until the fore limbs were fully extended, and afterwards resting the chin on the ground between the legs.

If he were tied up, he immediately hung from the headstall, leaning all the while to the left side.

His appetite was unimpaired; and, to all appearance, he did not suffer acute pain.

He was destroyed after being under observation, at the request of the owners, for about three weeks, during which time the muscles of the limb had been rapidly wasting.

The post-mortem examination brought to light the fact that both first sternal ribs were fractured, also that no serious primary injury had been received by the limb. The fracture of the left rib extended obliquely from above downwards and forwards. The right rib was broken in a transverse direction, just below its superior extremity.

These lesions, caused in all probability by a fall on the sternum, are represented by Figs. 2 and 3.

FIG. 2.—Fracture of first sternal rib (near side)

FIG. 3.—Fracture of first sternal rib (off side)

In endeavouring to account for the presence of the symptoms described, the anatomical relations of the injured structures must be borne in mind. On referring to the drawing of the left rib, it will be noticed that the fracture was in such a position as to be very liable to allow injury to the brachial artery, and also to the nerves which go to form the brachial plexus. The *Serratus magnus*, which aids in connecting the fore limb to the trunk, is also partly attached to the external surface of the first sternal rib. Thus may be furnished an explanation of the loss of power over the limb, and of the marked atrophy of the muscles before alluded to. The persistent curving of the neck was produced, in all likelihood, through interference with the action of the *Scalenus* on the near side.

A TEST OF SURGICAL SKILL.

I have just seen an article in *The Veterinarian* called "What is it we want?" in which "a correspondent" makes the following statement—"Mr. Raymond is trying to introduce an examination in operative Surgery for the Fellowship degree of the Royal College of Veterinary Surgeons. Where did he borrow his idea from?" As it is too late to answer this question in *The Veterinarian* perhaps you will kindly give me space in your weekly. In the first place permit me to say that I am not taking any steps in the matter. In the course of some remarks upon other subjects at the Central Veterinary Association I made a suggestion just as it occurred to me; and I will tell you why. It had been my duty to act as Examiner in Surgery a few days previously, and I had been astonished at the extraordinary want of knowledge in practical surgery which had been shown by some of the candidates, and it occurred to me—as it did not appear to be necessary that the ordinary operations should be mastered for the Diploma of Membership, that at least Fellows should be able to operate decently, and considering that by going to a horse-slaughterer's and spending half-a-crown anyone can practise any number of operations, I do not think it is asking too much. Your readers will see that I had no occasion to borrow the idea from *The Veterinarian*, nor *The Lancet*, nor *The Record*. I have often visited the London College, and seen the students firing horses, &c., and I always thought that they had sufficient instruction until they came (with their diplomas) to be examined. It was then that I discovered that, although one or two were really very good men, the others were simply scandalously ignorant. This correspondence has been, in a sense, thrust upon me, and it would not be right to keep silent. I do not think it is fair, either to the public or to the young fellows themselves, that they should not be *forced* to gain a proper amount of practical knowledge before they are turned out to shift for themselves.

F. RAYMOND.

TEXT BOOKS.

The near approach of another Session at the Veterinary Schools has suggested that it may be worth while to compare the text-books used at each Institution. We have, thanks to the courtesy of the respective Principals, been able to compile the following table:—

FIRST YEAR.

THE ROYAL.	THE ROYAL (DICK'S).	THE NEW.	THE GLASGOW.
Attfield's Chemistry	Roscoe's Chemistry	Wurtz's Elements of Chemistry	Roscoe's Chemistry
Stockhart's Experimental Chemistry	Crum Brown's Elementary Chemistry	Macadam's Practical Chemistry Tables	Oliver's Botany
Edmond's Botany	Brown's Elementary Chemistry	Oliver's Lessons in Elementary Botany	Prantyl and Vine's Botany
Bentham's Flora	Finlay Dun's Veterinary Medicine	McNab's Classification of Plants	McFadyean's Comparative Anatomy (Part I.)
Oliver's Lessons	Oliver's *or* Bentley's Botany	Strangeway's Anatomy, by Vaughan	
Strangeway's Anatomy, by Vaughan	McFadyean's Anatomy of the Horse	Chauveau's Anatomy, by Fleming	
Chauveau's Anatomy, by Fleming	McFadyean's Comparative Anatomy	Turner's Human Anatomy	
Steel's Outlines			
Geoffry Bell's Comparative Anatomy			

SECOND YEAR.

Anatomy (as in Class A)	McFadyean's Anatomy	Kirke's Physiology	Chauveau's Anatomy, by Fleming
Power's Elementary Physiology	Turner's Introduction to Anatomy	Marshall's do.	Strangeway's Anatomy, by Vaughan
Kirke's Manual	Huxley's Physiology	Huxley's do.	McKendrick's Physiology
Huxley's Elementary	Kirke's do.	Anatomy (as in Class A)	Foster's do.
Schafer's Essentials of Histology	Mead's Physiology of the Domestic Animals	Finlay Dun's Veterinary Medicines	Finlay Dun's Veterinary Medicines
Tuson's Veterinary Pharmacopœia	Stirling's *or* Klein's Histology	Tuson's Veterinary Pharmacopœia	Morton's Pharmacy
Finlay Dun's Veterinary Medicines	Fitzwygram's Horses and Stables		

THIRD YEAR.

Green's Morbid Anatomy	Walley's Four Bovine Scourges	Williams' Veterinary Medicine	Williams' Veterinary Medicines
Hamilton's Pathology	Fleming's Veterinary Obstetrics	Williams' Veterinary Surgery	Williams' Veterinary Surgery
Robertson's Equine Medicine	Green's Morbid Anatomy	Steel's Diseases of the Ox	Robertson's Equine Medicine
Steel's Diseases of the Ox	Woodhead's Practical Pathology	Steel's Diseases of the Dog	Hamilton's Pathology
Youatt On Sheep	Hamilton's Pathology	Green's Morbid Anatomy	
Steel's Diseases of the Dog	Neumann On Parasites	Hamilton's Pathology	
Cobbold's Manual of Parasites	Smith's Hygiene	Nicholson's Manual of Zoology	
	Steel's Diseases of the Ox	Huxley's Elementary Biology	
	Klein's Micro-Organisms		

It will be seen from the above that no great differences exist in the books recommended. At each School some special works of reference are used but these are selected by the lecturers and mentioned during the course. There is certainly a much wider scheme of reading than obtained twenty years ago and we hope the students will carefully digest all they read.

COMMITTEES OF COUNCIL.

It is often claimed that most of the hard work done by members of Council is unseen because it is done in Committee. There is some truth in the statement, but not as much as there should be. With the exception of the Registration Committee hardly any of them have any work. Some little committees meet on the same day as the Council and spend an extra half hour on their subject; some never meet at all. As at present arranged it is difficult to say what real use our Committees are. They are handy for one purpose. Any complicated or tedious question brought before the Council is comfortably postponed—or got rid of—by sending it to a committee: perhaps the committee meets and discusses the subject—What they say is never known for no formal report is ever made. The usage is, for the Secretary to take a few notes and then, with the President's assistance, give a sort of *précis* of what the committee said, and perhaps embody one or two resolutions passed. This production is then read to the Council who generally vote that the Committee's recommendation be accepted. Committees very seldom adjourn to collect information, and they can only meet when called by the President. In the older days when the council was only a little family party and ran the machine slowly and smoothly, not wishing for progress, detesting any mental exertion, and apprehensive of nothing except their chances of re-election, these

leisurely proceedings might have been tolerated. Times have changed. If the profession is to keep progressing with the times, if it is to hold its proper relative position to other callings it must alter its governing body. The ways of the council and its committees are incompatible with progress. Out of the thirty men forming the council twenty have been members for years, and if they could be looked to for any reform we may well ask— Why have they initiated none? The committees are re-elected every year with perhaps the addition of some new member of council. The re-election is a sort of perfunctory performance founded on only one principle—the principle that is our curse—that of appointing a man because he thinks he ought to be appointed, or because he *has* been appointed. *Special fitness* ought to be the test of a man's election on a committee; it is not. All the committees of any consequence are crammed with men especially the Parliamentary, which has had no work since 1881. Three-fourths never attend, and those who do make no enquiries but accept the views of one or two who take some extra interest in the matter under consideration.

Sir Henry Simpson has carried a resolution which will perhaps ensure a larger attendance on committees, but it is specially unfair to all those members who live at a distance from London. He has also suggested a scheme which will ensure a proper formal report to the council from each committee, but what is most wanted is men who will attend, and men who will take a real interest in the progress of the profession. No tangible improvement will result from mere alterations of procedure. When the profession refuses to elect any man to a seat on the council unless he distinctly pledges himself to the principles he holds and the objects he desires, then, and not till then, will we have a council able and willing to steer the Body Corporate in the right direction.

OBSERVER.

ON SPLINTS.

By W. HUNTING, F.R.C.V.S.

Perhaps no unsoundness of horses is more common or more uncertain in results than splints. Nearly every young horse shows them, many suffer a period of lameness from them, but it is only in very rare cases that the lameness is prolonged, and still more rarely that is permanent. My own experience includes hardly more than two cases in which a splint has rendered a horse useless for work, and in each case the evil has been due to the splint affecting the knee-joint. As surgical cases splints are hardly worth notice, rest alone—or at most rest with a blister—in all but exceptional cases effects a cure. It is in examination for soundness that they possess an importance.

A four-year-old is passed sound to-day with no sign of splint, and in a week is dead lame. No skill enables a man to anticipate a splint, and no tact enables an examiner to explain satisfactorily, to a client who is not a horseman, that the horse he has just passed was not a sound one. Actions at law result, and when your lawyer's bill is paid it is very small satisfaction to know that you have won your case and lost your client. The fact is, legal soundness and practical utility are not synonymous. A man may buy a horse useful in every respect which is not *sound*, and a man may buy a horse practically useless which presents no sign of any unsoundness.

Two cases of splint lameness are fresh in my memory. I examined a horse and passed it sound, with the exception of two small splints. Although they were situated in the middle of the cannon bone, and well forward, I thought of possible actions, and to guard against any risk, as the horse was not five years old, I suggested a warranty for these little defects. It never entered my head that they would cause lameness, but they did. The smallest splint caused lameness in a week, but cold water and rest resulted in soundness in a few days. Work again caused lameness, and, as the month was nearly up, the question arose whether he should be returned or kept. He was a valuable horse and very suitable otherwise, so was kept. For six months that horse was more or less lame; but is now, and has been for some time a perfectly sound animal (it was three years ago). Suppose I had not obtained a warranty! Would the purchaser have waited patiently, or would he have jumped at the conclusion the horse was unsound?

The second case was different. I passed the horse sound, with the exception of a splint on the *near* leg, which I did not think would ever cause any lameness. I formed the opinion on the fact that the splint was well developed and well placed. A week after purchase he went lame on the other leg—the off—and the lameness was traceable to a splint just under the knee. No sign of such a defect was visible at the time of examination, and I could not anticipate its formation. Of course dissatisfaction at the loss of the horse's services resulted. A blister and three weeks' rest resulted in soundness. Time was allowed for exercise, and then work was resumed. Lameness again resulted, and a further blister was followed by a run at grass. Resumption of work again entailed lameness, and now, after six months, the horse is sound and again at work; but who shall say when he may again break down?

In ninety cases out of a hundred we may safely over-look a splint—at any rate we may expect a horse with one to remain sound. To condemn an animal for this defect is usually to prevent a client from purchasing a useful horse. Many dealers object to giving the warranty that would protect all parties; but to pass as sound a young horse with a splint is too risky an undertaking for one guinea. Safety is only to be found in a mention of every defect, no matter how simple it may appear, and tact is required so to word the certificate as to avoid blame and possible law-suits. Even with the greatest caution, although we may avoid law and its inevitable costs, we cannot avoid the loss of a client who does not understand, and will not listen to any explanation. The rule of conduct seems to be that laid down by Shakespeare, "To thine ownself be true," and then we may safely trust that our actions

will, in the long run, result in satisfaction all round. It is impossible to please everyone: we must be content to please ourselves, and guard against unfair attacks by always adopting a form of certificate complying with the law, *i.e.*, one which mentions all patent defects.

Much trouble would be saved if when other practitioners were called in they would hesitate to express positive opinions as to the length of time a defect *must* have been in existence, There is no more difficult task than to say how long an appearance must have been evident. It is not a sign of wisdom to be positive on this point, but it is often accepted as such by the public and by juries. Every old practitioner must have been astonished occasionally by exceptional cases, and we never know when these may occur. If all cases were looked upon in the widest manner, and no confusion allowed to exist between what *must* and and what *may have* been we should hear less of contradictory opinions. There are matters of fact and matters of opinion, and the most experienced and most careful man may be wrong in his opinion. Perhaps nothing teaches this more forcibly than splints—their effects, their formation, and their duration.

VETERINARY MEDICAL SOCIETIES.

BOMBAY VETERINARY ASSOCIATION.

The Second General Meeting of the Members of the Bombay Veterinary Association was held at the Veterinary College, Parel, on 11th September 1889—Veterinary Surgeon Steel in chair. Present—*Members:* Messrs. Steel, Nariman, Sukhia, Engineer, Vakharia V. E., Dhakmarwala, Ranina, Reuben, Patel D. N., Godhino, Joshi, Kshirsagar, Albuquerque Fernandez, F., Chamarette, Quadros, Sirke, and Narsingrao. *Visitor*—Mr. Daroowala. After some interesting specimens had been exhibited and discussed.

Dr. Nariman next read the following *notes of an interesting and unique case of ante-partum prolapsus vesicæ.* A buffalo was brought to the hospital for a large and circular tumour protruding from the vulva: the tumour was fluctuating and had two coverings, an inner one thin and white, an outer one red and muscular. In the centre of the muscular wall was a circular orifice of the size of a rupee with rugosed margin: the muscular wall was further lacerated to an extent of about four inches, a little below the circular opening. The tumour, after a hasty examination, having been decided to be the fœtus with membranes entire, and all attempts at reduction having failed, the inner layer was slit open corresponding with the rent in the outer layer. About a gallon of thin watery fluid escaped: the fluid had a slight alkaline odour but was not distinctly urinous. On passing the hand through the collapsed tumour no fœtus was detected. On trying to replace the tumour now, it was clearly seen that the throes subsided and the animal was only easy whenever the tumour was reposed in the lower part of the pelvic cavity. For about twelve hours the animal seemed quite easy, walked about and took her feed, but the prolapse recurred, this time causing laceration of the inferior commissure. The tumour was again replaced and a Dobert's truss applied but the patient sank gradually and died the next day.

Post-mortem examination.—Uterus entire, much distended, contained an about eight months fœtus apparently in a good state; the mucous membrane of the uterus including the cotyledons very pale; growing from each cotyledon on the chorion were large blue cysts distending the uterus to an enormous extent and containing watery fluid (more than one hundred cysts altogether). Bladder collapsed and gangrenous. It is interesting to note the following points in connection with this case. (*a*) So far as I am aware no case is recorded of ante-partum prolapse of the bladder in the buffalo, (*b*) the cystic disease of chorion is rare in the ruminants, though similar disease is often found in placenta of women (*c*) it is very difficult if not impossible to diagnose between prolapse of the vagina or uterus and that of the bladder, except by the presence of the aperture of the urethra which was not marked in the present case.

Mr. President and gentlemen; I rise this evening to submit short notes of some interest and importance for your consideration.

The following essay was then read

"The Coloration of Indian Bullocks."

By Mr. V. E. Vakharia.

I need scarcely state that in India the bovine tribe in one province differs materially from that in another, in size, colour, &c. One important place producing animals of large size and heavy stamp is Guzerat; the colour of Guzerat bullocks is mostly white. Yoked to big carts, a pair of large white bullocks is not an uncommon sight in the streets of Bombay. These large unwieldy animals are useful mainly for heavy draught, their cheief employers being the owners of factories, &c., also they are kept by Government, Municipal, and Commissariat Departments. On account of their wanting in speed, and being too big for the ordinary conveyances, they are not commonly employed for other purposes.

Next to the Guzerat bullocks in size, are the humped cattle of Bengal. They are peculiar for possessing large humps, and the colour most frequent among them is red.

The Mysore bullocks are almost equal to the last in size, if not larger, and are lighter-made animals. White and grey are the colours usually met with among these animals, although now and again red coloured ones are to be seen. The variety among which the red colour is most prevalent are the hardy little bullocks from the Deccan. Almost all the animals working in Bombay in hack carts and conveyances are of this caste. In them, as I have pointed out, red is the colour most prevalent. From statistics taken, it is found that in 1,000 bullocks there are 378 having their colour red, 271 white, 70 black, 97 grey, and 184 mottled or parti-coloured, including 106 red mottled (skew-bald) and 78 black mottled (pie-bald).

From the above it will be perceived that the colour most predominant among Indian bullocks, particularly among those found working in Bombay, is red, varying from a very light red colour, approaching light dun, to so dark a one as to be scarcely distinguishable from black at the shoulders and hind quarters.

White colour comes second. As already shown, it is the colour usually seen in the Guzerat bullocks, and it prevails next to red; it ranges from pure (silver) white to slightly dirty white colour.

Although black is said to be the best colour for working Indian bullocks, and such animals are said to possess strong constitutions, and to be better able to bear exposure and heat than any other coloured animals, it is surprising that they are so seldom met with.

The grey colour is pretty fairly scattered among

them. It occurs from a pale grey or a very dark one almost black on the shoulders and the quarters.

The parti-coloured ones, *i.e.*, pie-balds and skew-balds, are more frequently seen than the pure greys or blacks. The patches of the colours in parti-coloured bullocks are of different dimensions and various intensities. It is sometimes a very difficult task to make out the colour of the coat on account of mixed colours resulting from the injudicious selection of different coloured sires and dams.

The next point of importance is to know what is the colour of the skin immediately below the hair. Ordinarily, the colour of the skin corresponds to that of the hair, but this is not invariable. A bullock with a white coat may have a dark skin, and one with a darkish colour of the coat may have a white skin, or a bullock that has a parti-coloured coat may have a white skin, if the patches be of a light colour, or may have a dark skin in case the patches be dark; or his skin may be a dappled one. Although the colour of the hair generally depends much on that of the skin, on the pigment cells of which the hair depends for its colour, it does not necessarily follow that a parti-coloured animal must have a parti-coloured skin.

I think it would not be out of place here nor uninteresting to know what colour the skin would assume when it is converted into leather. To ascertain the true colour of the skin it is necessary that the colours of the following parts of the body be taken into consideration, *viz.*, the colours of the muffle, the perineum, the scrotum, the heels, the coronets, the horns and the hoofs, and the general surface of the body. The colour of the skin also can be seen by raising the hair and looking at its roots.

As regards the muffle, it is found that parti-coloured animals generally have it mottled, or sometimes white or black or chocolate coloured. The muffles of red animals are either of a white, or a black, or of a chocolate colour. There can be no doubt that a black bullock has generally a black muffle, but a white bullock also may have a black one. The colour of the muffle, in most cases, corresponds to that of the skin, or to that colour which prevails the most; consequently, the muffle may be looked upon as a point of great importance as to the determination of the colour of the skin. Thus, if an animal has a white muffle, white perineum, white coronets, and white surface of the body, he is a true and perfect white bullock. Even, if an animal has a white muffle and a white surface of the body, without a single well-marked patch of any dark colour, it might be put down that the skin, when prepared, will make leather of a white colour. In the same way, if a bullock has a black muffle, and with it, if any of the several points has been of the same colour, or if he has simply a black muffle, and black surface of the skin, even though the colour of the hair be white, his hide will be of a black colour.

Now returning to the statistics, we find that the colour "red" prevails the most, and among animals of this colour, as we have seen, the muffles are generally black, and so, also, are in many cases, the skins; besides, most white bullocks have black skins and muffles; their hides therefore would also be black. The same might be said of some of the grey and parti-coloured varieties.

From the above matter that I have put before you one can hardly help arriving at a conclusion that the preponderance of black hides to white ones is in India very great.

The following discussion then ensued:—

The CHAIRMAN considered the Association much indebted to Mr. Vakharia for bringing forward a subject of considerable interest, especially since Professor Wallace's visit to India had given rise to much difference of opinion on the subject. In view of the subject to be dealt with he (the Chairman) had that morning, while travelling in a tram car through a crowded part of Bombay, observed the colour of the muffle in 125 bullocks working in carts. He found this part black in 50 per cent., mottled in 10 per cent., chocolate in 10 per cent., and white in 30 per cent. As a white muffle almost invariably and a chocolate and a mixed muffle very frequently goes with a white skin, it follows that the percentage of black-skinned animals observed by him this morning is coniderably lower than Professor Wallace's estimate. He would like to draw the attention of the Essayist and the meeting to the important fact that the pigment resides in the deep layer of the cuticle, not in the true skin, so that a tanned hide from a black bullock is not black but brownish-white and a black pig after scalding and scraping is white. There are very few conditions under which the cutis vera is impregnated with pigment.

MR. DHAKMARWALA then gave some interesting statistics of 50 head of cattle examined by him that morning in the Hospital. Of the muffles he found 54 per cent. black, 30 per cent. white or chocolate, and 16 per cent. mixed.

MR. RANINA stated that in the Municipality cattle under his charge he should estimate 60 per cent. as having white hair, but should say the muffle is generally black. He was not prepared with statistics in this matter.

It was then proposed by Veterinary Surgeon Steel, seconded by Mr. Ranina and carried—"*That a committee be formed of Messrs. Steel, Dhakmarwala, and Vakharia to further investigate this question, and to collect information as to the colours of bullocks from different parts of India.*"

EXTRACTS AND NOTES.

REMARKS ON NERVE GRAFTING.

Read in the Section of Surgery at the Annual Meeting of the British Medical Association, held in Birmingham, July, 1890.

By EDWARD ATKINSON, M.R.C.S.

Senior Surgeon, Leeds General Infirmary.

Nerve-grafting consists in the insertion of a fresh piece of nerve, newly taken from man or animal, into the gap left by the removal or destruction of a portion of a nerve in its continuity, whether by design or accident, and in suturing it into position. This has been done five times in all here—twice by Mr. Robson, once by Mr. Ward, and twice by myself. Of these, one (Mr. Robson's first case) was performed forty-eight hours after division of the median while removing a neroma. Two were deliberately planned; the one for tumour involving a nerve, the other for paralysis due to an old cicatrix. The remaining two were done under emergencies; the first for the accidental removal of a portion of the sciatic nerve while excising the hip in a child—where the same piece was replaced in its former position; and the second was for a lacerated wound of forearm, involving the destruction of two inches of the ulnar nerve. In all five cases, sensation, entirely lost before, began to be restored after an interval varying from thirty-six hours to eighteen days, and steadily improved.

NOTE. We only reprint one case, as being sufficient to make the conclusions clear.

Case v.—C. P., aged 22, miner, was admitted on April 19th, 1890, under my care with severe lecerated wound of the right forearm and paralysis of the inner half of the hand, corresponding with the distribution of ulnar nerve.

Patient is a miner, and was working in the mine two hours previous to my seeing him, superintending a coal-getting machine, when the shaft caught his arm against a fixed part of the machine and inflicted the wound above mentioned. On examination he was bleeding profusely from the ulnar artery, which was torn across. The flexor sublimis, flexor carpi ulnaris, and palmaris longus were torn through, and the ulnar nerve was missing from its normal position. On searching, the two ends were found two inches apart, the distal end having disappeared behind the upper margin of the annular ligament. After securing the bleeding vessels, the wound was cleansed and asepticised as far as possible by long irrigation and drenching in bichloride of mercury solution 1 in 3,000. The extent of the wound longitudinally was over six inches. No human nerve being available, a live rabbit was now procured and killed, and the two sciatic nerves very carefully removed and immersed in weak warm carbolic lotion. Two and a half inches of each nerve—which were together scarcely equal in calibre to the divided ulnar—having been laid in the gap, were sutured into position with a single stitch of fine catgut through each nerve to the refreshed ends of the ulnar. The torn muscles were then stitched, and the skin, which did not appear much bruised, was brought together and sutured. The whole limb, dressed antiseptically, was put on a posterior wire splint.

The dressings were not touched for five days, but on being taken down on April 24th there was great strain on the skin flaps, and on removing the stitches a large quantity of brownish blood-stained pus escaped, and the wound looked in a nasty condition, part of the flexor carpi ulnaris having sloughed away. The wound was well irrigated, and poultices of salicylic wool applied. The nerve graft was not seen.

Although the untoward state of things was disheartening, it could cause no surprise, considering the amount of contusion and laceration the muscles had undergone. In a few days the parts assumed a more healthy appearance, however, and in a week's time a crop of florid granulations lined the wound.

On the eighteenth day, to my surprise, there was a distinct beginning of sensation in the ring and little fingers. On the twenty-fifth day (May 12th) the wound was closing in; the sensation in the two fingers and hypothenar eminence was increasing steadily, and some power of movement had commenced.

On May the 22nd the wound was almost entirely healed. Faradism had been employed several times with full reaction on the muscles supplied by the median and radial, but not in those supplied by the ulnar. This was now changed for the constant current daily.

The man becoming impatient, was allowed to leave the hospital five weeks after admission, and from that time was only seen twice as an out-patient. Upon sending for him last week (July 24), just three months after his accident, the condition was as follows: Sensation complete in all the fingers on both aspects, with the exception of the last two phalanges of the little finger. Can flex all his fingers on the palm, except that the little finger stops short of the palm by half an inch. This, considering the existence of a cicatrix 5½ inches long just above the wrist, is very surprising. Has a fairly strong grip. Has returned to his work in the pit, and can work his machine, which requires him to grasp a handle.

My object in this paper is not to venture upon any histological theory as to the manner in which the small amount of clinical facts at my disposal may be explained, but to endeavour to draw some practical conclusions from our experience hitherto, such as may encourage to further trials in the same direction. I would then, submit as follows:—

(*a*) That absolute loss of a piece of nerve and the substitution of a new piece constitute a totally different condition of things from the simple suturing of a divided nerve.

(*b*) That, whether there be such a thing as "primary union" of nerve fibres or not, in the case of recently divided nerves united by suture, this process cannot take place in nerve-grafting, and yet union of some kind rapidly follows this operation, restoring function.

(*c*) That healing by first intention does not appear to be indispensable to success, or even asepsis, because suppurative inflammation, and even the sloughing of muscle in the immediate neighbourhood of the new graft may occur without destroying its vitality.

(*d*) That restoration of muscular movements is always delayed, sometimes until long after complete sensation is re-established

(*e*) That, while mindful of the free interlacement of nerves in both upper and lower limb, the results obtained by nerve-grafting in a variety of cases are not to be altogether explained in this way.

1. The first proposition is, of course, self-evident; and I make it only to clear the ground, because in the discussion which followed the reading of Mr. Robson's paper there appeared to have been some confusion between nerve-grafting and nerve-suturing.

2. It has been laid down authoritively "that the divided ends of a nerve which has been cut across readily reunite by cicatrical tissue, but that the cut ends of the fibres themselves do not thus reunite." This seems highly probable, if for no other reason than that, whether the ends be held in contact by suture or simply left to Nature, There can scarcely be perfect opposition of the individual fibres. I cannot, therefore, see that the theory of "primary union" is tenable; but, provided the cut ends of the nerve be kept in tolerably accurate contact, the interposed layer of cicatricial tissue will be a very thin one. The doctrine of the invariable degeneration of the peripheral portion of the divided nerve does not appear to be so universally held. That this process is not invariable seems to be shown by the fact that function is sometimes restored where the vicarious action of nerve interlacement has not come to the rescue, and was the case in the man (Case No. III.) whose hand was paralysed for six months from a wound that had divided both median and ulnar nerves, but in whom the subsequent grafting of the nerve and reuniting the refreshed ends of the other was followed by gradual restoration of sensation in the median tract, and tolerably good use in the hand, though sensation in the ulnar tract did not return so promptly.

3. Among the conditions recommended by Mr. Robson for performing the operation of nerve-grafting was strict asepsis. Naturally we should always aim at this, and in a deliberately planned operation we might generally expect to carry it out, and obtain healing of the wound by first intention; but that success does not absolutely depend on these favourable conditions is proved by Case No. v, where the operation was one of emergency, and where despite every care in the cleansing of the wound, the amount of injury to the muscles was followed by suppuration, and even some sloughing of muscular tissue. This at the time destroyed my hopes of any good resulting; and yet, strange as it must appear, after three months' interval, the patient comes from his work to show a useful well-nourished hand, with not only sensation restored over the whole area of ulnar distribution, except the two last joints of the little finger, but also a good grip, flexion of all the fingers on the

palm, and the ability to work his coal-getting machine in the pit almost as well as before his accident.

4. That the restoration of muscular movements is longer delayed than the recovery of sensation—sometimes for months, and sometimes very imperfectly, if at all—is perhaps not to be wondered at, since the first effect of cutting off the nerve supply of a part is the wasting of the muscles from trophic lesion, and this would be naturally increased by want of use; but after sensation had begun to be re-established the regular use of the constant electric current largely promoted the nutrition of the muscles. Why the motor elements of an injured nerve are slower than the sensory elements in recovering their function does not appear to be understood.

5. It has been argued that the well-known fact that branches of different nerve trunks in the extremities not infrequently join with one another is a sufficient explanation of those cases where, for example, the median has been sutured after accidental division, with the effect that sensation has returned in the parts supplied by the nerve in a few hours. "Such return of sensation, it is alleged, is probably due to the supplementary action of the interlacing nerve-fibres bound up with other trunks.....so that the sensory impressions are returned by another route." (Treves).

But these communications of nerve fibres are a very different thing from vascular anastomoses, which enable a part cut off from its normal blood supply to avail itself of a collateral circulation; for it has been shown that "the medullated fibres themselves, in their course along the nervous cords, never anastomose." (Quain). *British Medical Journal.*

ON CHLOROFORM-WATER AS A PRESERVATIVE

By Jos. F. Burnett, F.C.S., Pharmaceutical Chemist.*

After a few introductory sentences the author proceeded to say that for the keeping of various chemicals in solution, so as to be convenient in rapid dispensing, nothing that he had tried was so effective, and at the same time so free from objection as chloroform-water. It is not needed for the solutions of inorganic substances. The advantage is evident in cases of solutions of organic chemicals, which are prone to decompose, ferment, &c., through the presence of fungoid organisms. The following is a list of those which the author regularly keeps made, in each instance solution being effected by dissolving the substance in B.P. chloroform-water, and adjusting to the required strength by the final addition of more chloroform-water:—

Citric acid, 1 in 2.	Ammonium chloride, 1 in 4.
Potassium acetate, 1 in 2.	Ammonium bromide, 1 in 4.
Potassium citrate, 1 in 2.	Quinine sulphate, 1 in 10 (by the aid of a sufficiency of dilute sulphuric acid).
Citrate of iron & ammonia, 1 in 2.	
Sodium salicylate, 1 in 2.	

Never in any of these is there any fungoid growth, even though they are kept in the varying temperatures of summer and winter for months. Mucilage of acacia, made with chloroform-water, keeps indefinitely. There can be no drawback to the use of chloroform-water as a preservative, for the addition of one or two drachms—or even an ounce or two—to a mixture cannot have any injurious effect on the patient.

The second class of substances which he preserves with chloroform is infusions, either B.P. strength or concentrated (1 to 3). Those with which he has experience are quassia, gentian (strength as B.P., but without orange and lemon), senega, and cascarilla—all single and concentrated. Calumba, buchu, and orange—in the concentrated strength only. The preservative action of chloroform is perfect in all these when concentrated, the chloroform being added to the strained infusion in the proportion of 1 drachm (fluid) to each 40 fl. oz., and dissolved by agitation. The aroma of these preparations when diluted is much more like the fresh infusion than concentrated preparations of wholesale-house manufacture, and in no case does the chloroform cause any deposit—an advantage over alcohol when the infusion contains mucilaginous matter.

From the proceedings of the Pharmaceutical Conference at Leeds.

Another Paper on the Same Subject.

By Harold Wyatt, Jun., Pharmaceutical Chemist.

Mr. Wyatt's experience is much akin to Mr. Burnett's, but quinine, morphine, and other alkaloid salts in chloroform-water alone, remain clear and devoid of fungoid growth under conditions which would necessitate the use of at least 25 per cent. of proof spirit for their proper preservation. The action was specially observable with an extract of ergot mixture containing solution of strychnine, which was kept concentrated, but did not keep four days free from mould and trimethylamine odour until chloroform water was used to make it. With this it kept good for three months. Mr. Wyatt proceeded to state that fruit-juices keep very well with chloroform added in the proportion of 1 part in 600, the aroma being rather improved than otherwise by the addition, at any rate in the case of raspberry, lemon, and blackberry juices. Chloroform is also a great success with essence of rennet, which when preserved with it never acquires the slightest unpleasant odour.

Mr. Martindale observed that it was a curious fact that the action of chloroform in this way was essentially inhibitory—it was not germicidal—and if the contents were already infected the fungoid growth would proceed. It acted as an anæsthetic to the matter which passed in.

THE BERLIN CONGRESS.

THE ETIOLOGY OF TUBERCULOSIS.

Professor Bollinger (Munich) opened the discussion, and spoke of the different portals through which the tubercle virus entered and its localisation in different organs. As the author has published a *résumé* of his address in the *Münchener Medicinische Wochenschrift*, I will only confine myself to a few of the more salient points. That the skin is but little predisposed to the reception of the tubercle bacillus is shown by the rare occurrence of cutaneous tuberculosis either in those who, like butchers, continually handle tuberculous masses, or in persons suffering from phthisis. In children the skin forms a better nidus, and the tuberculosis described in some cases following circumcision in children shows that the subcutaneous tissues is much more predisposed than the cutis. Through vaccination tuberculosis cannot be conveyed, nor can the tubercle virus penetrate through the pores of the skin. The mucous membranes adjacent to the skin have a great tendency to allow the virus to pass without they themselves becoming affected, and this is still more likely to occur if the mucous membranes are inflamed or otherwise affected, as in otitis, rhinitis, conjunctivitis, keratitis, blepharitis, and pharyngitis. The virus passes from these mucous membranes to the neighbouring

lymphatic glands, and we thus get the primary glandular tuberculosis (scrofulosis of the lymphatic glands). The lungs form the principal portals for the entrance of the virus, which in form of dust is aspirated into the alveoli of the lung; the virus most probably is uniformly distributed over the different parts of the lungs; but while most of the bacilli are destroyed by the organism, those entering into the apex, owing probably to several factors, settle and develop; hence the presence of so-called healed phthisis in the apices of so many individuals. In children, especially, the tuberculous virus may pass through the lungs and become deposited, and further develop in the intra-thoracic glands, and thence may invade the lungs, the pleura, and pericardium. The lungs may also become secondarily invaded from other organs which are the seat of primary tuberculosis, as the intestinal tract, peritoneum, and subcutaneous tissue. Primary tuberculosis of the testicle, of bones and joints is due to a latent hæmatogenic infection, the virus passing through the lungs or mucous membranes without affecting them, and then entering the blood-current. Tuberculosis of the larynx is in by far the largest marjority of cases due to an auto-infection with sputum. Of the digestive tract, we find the upper part (oral cavity, pharynx, œsophagus, stomach, duodenum, jejunum) but little predisposed to the infection, the lymph follicles of the ileum and of the large intestines much more so. Primary tuberculosis of the intestines associated with tuberculosis of the mesenteric and retro-peritoneal glands in young persons is due to infection by food; in most cases through the ingestion of raw, unboiled milk from tuberculous cows. Secondary tuberculosis of the intestines is due to an auto-infection by sputa, or may be occasionally hæmatogenic. The gastric juice has deleterious effect on the vitality of the tubercular virus, but it is no by means satisfactorily made out that it kills outright this virus. Tuberculosis of the peritoneum, which is from three to four times more common in men than in women, is occasionally primary, much more often secondary, being continuous with a tuberculosis of the intestines or lymphatic glands, or due to hæmatogenic infection. Experiments on animals have shown that the serous membranes, like mucous membranes, may allow the virus to pass, and in intra-peritoneal inoculation the peritoneum may remain unaffected, and tuberculosis appear in other organs. The author then spoke of milk and meat from tuberculous animals as etiological factors in producing tuberculosis. As regards milk, it is ascertained beyond doubt that milk derived from cows in which the udder is diseased is eminently dangerous. Milk from tuberculous cows in which the udder is healthy is also virulent to a great degree (up to 55 per cent). (This is according to the author's experiments). The virulence is proportionate to the extent of the tuberculosis in the animal, and it may even occur when there is only local tuberculosis in the animal. The leucocytes most probably convey the virus to the healthy udder. As regards infection from milk of tuberculous women, we have as yet only negative evidence. The various products of milks, such as cream and butter, obtained from milk of tuberculous animals, retain the power of infection, as proved by experiments both by feeding and inoculation. Butter artificially impregnated with tuberculous virus retains its virulence for months. If milk from tuberculous cows is diluted, the virulence is much lessened. Hence milk collected from several animals is to be preferred. The contaminated milk is chiefly, then, dangerous to children and persons predisposed to tuberculosis when it forms the sole diet, when it is undiluted, and when it is consumed in the raw state. Against the virulence of the products of milk (cream, butter, and cheese) we have at present no protection. Milk forms also an important etiological item in the dissemination of tuberculosis in animals—cows, oxen, and pigs,—as the young animals are fed on milk. As regards meat from tuberculous animals, inoculation experiments have shown that meat derived from animals far advanced in tuberculosis has virulent properties, which, however, are destroyed effectively by sufficient boiling. The meat from animals in an early stage of tuberculosis gave negative results on experimentation. The author concludes from this that the danger of infection by meat is not very great, and can be entirely obviated by thorough boiling of the meat. To effectively ward off the danger from milk and meat we have to adopt general measures to diminish tuberculosis in animals, which at present prevails to an enormous extent. The author then spoke of the relation of the quantity of tubercular virus to the virulence of infection, and of the various predispositions. He distinguishes: (1) Predisposition of species (man, monkey, the bovine race, pig); (2) family predisposition (heredity, phthisical *habitus*; (3) individual predispositon (general constitutional predisposition, often acquired); (4) Predisposition of organs (lymphathic glands, spleen, serous membranes, lungs, and parts of organs, such as apex of lungs, basal meninges, and mucous membrane of larynx); (5) Predisposition residing in cell elements (endothelia, wandering cells, &c.)—Professor Ponfick (Breslau) followed, and submitted the following theses:—(1) Tuberculosis, being always due to an exogenous bacillus, is at first a local disease; (2) hence its primary seat, which, however, may remain hidden, is always in those organs which are in immediate contact with the external world—namely (in the order of frequency of affection), in the respiratory tract, digestive tract, urogenital apparatus, and external skin; (3) tuberculosis affecting any other organ can only be due to an auto-infection through the lymph or blood; (4) the transition of local to general tuberculosis takes place either uniformly, or by bacillary deposits on the inner surface of the thoracic duct, or in stages, as by direct entrance of the virus into the blood current; (5) there are generalisations which run a peculiarly modified course which compel us to speak of a chronic military tuberculosis. —Professors Heller and Zenker took part in the discussion. The former has modified his views slightly, and is now more inclined not to disregard altogether what is called predisposition, though he explains the immunity which some have against the tubercle bacillus somewhat differently.—Dr. Bang (Copenhagen) directed his observations against the assertion of Bollinger that the milk of cows is virulent, even when the udder is healthy. The results of his experiments have already been published in the *Deutsche Zeitschrift für Thierarznei*. The milk of only two out of twenty-eight tuberculous cows with healthy udders proved infectious; in another set of experiments four were found virulent, but in three of these careful examination showed small nodules of infiltration in the udder.

The Lancet.

THE ARMY VETERINARY AND MEDICAL OFFICERS.

Our contemporary, the *Veterinary Journal* for September, in replying to our remarks, gives us credit for acknowledging the essential value of the veterinary staff towards army efficiency, but accuses us of sneering at its functions on service. Nothing was further from our intention; but we were indeed compelled by what we considered the overstrained comments in which it proceeded to make certain obvious comparisons between the importance of the duties in the field of those whose care is the human kind, and of others whose functions relate

to the lower creation—nothing more. At the same time, we deprecate placing the claims and merits of the army departments in competition, a line of argument both invidious and unjust, resorted to by the opponents of the medical officers on the rank question, and which no doubt drew forth the remarks of Sir Andrew Clark, to which our contemporary took exception. We agree with him that if the rankless army departments are to be unnecessarily forced into comparison, then none possess such unanswerable claims to titular military rank as the medical.

Our contemporary disclaims any antagonism in this controversy towards medical officers, which we readily in like manner do towards veterinary surgeons; and well it may, for it has ever been heretofore through the leverage of the medical that the other army departments have been raised.

We do not desire to exalt the medical over other army departments; for, as this controversy has developed, we have come to grasp more and more firmly the broad principles of military equality, now fully recognized in the French, Italian, and American armies; which is, that every officer and man in an army, whatever his functions, must have and hold definite titular military rank. Such title may, according to expediency, be either simple or compound, but must be military at least in part; such rank must be substantive and real within the limitation set upon the functions of the individual. Were such carried out, there would be little risk of friction, and no occasion for invidious comparison. Such we hold to be the true and coming solution of the rank controversy, one which the public will insist on when it is fully, as it is now being rapidly, put in possession of the points at issue. We feel quite certain enlightened public opinion will not tolerate, from whatever quarter it may emanate, any attempt to set up, foster, or maintain a jealous or exclusive caste system in the army, one alike unconstitutional and destructive of harmony and efficiency in the national forces.—*British Medical Journal.*

ARE WE BELATED?

New brooms sweep clean! The Pleuro-Pneumonia Act, which came into force with the present month, is scraping up cases of disease on every hand. This only shows how imperfectly the work of eradication was performed under the less drastic measures in force prior to the passing of the new Act. Let us hope it may soon rid the country of the last taint of disease. If its provisions are strictly enforced, as we sincerely hope they may be, we shall effectually banish the woeful malady in a very short space of time.

Full compensation from the National Exchequer is too tempting in these backward times to be turned away if there is any chance of being able to take advantage of it. Our only fear is that it may be too tempting and have the effect of encouraging, rather than repressing, the spread of the contagion. This, of course, would be a very great misfortune, and one which only the most exacting professional skill and scrutiny, backed up by fearless courage, could avert.

One of the very first things to be done is to insist upon the closest study of the symptoms and nature of the disease by veterinary surgeons. We are inclined to think that the veterinary profession knows less about the character of this and like diseases than it should do. The profession is a noble one, but, we fear, also somewhat belated in its scientific attainments. Be this as it may, it behoves the principals of our veterinary colleges and schools to inculcate upon students—the veterinary surgeons of the future—the necessity of a more thorough and searching study and perfect knowledge of the diseases which decimate herds and flocks, and the circumstances conducive and prohibitive to their propagation and development.—*The Farmer and Stock Breeder.*

Tuberculosis Infection

That tuberculsis or "consumption" is propagated by infection has become the established creed of eminent medical authorities. The source of infection is floating particles of dried sputum in the sick rooms and elsewhere. With regard to sleeping cars (and the same rule would apply to the internal appointments of public conveyances generally), Dr. I. W. Whitaker in the American *Lancet* says "that plush, velvet, silk and other textile fabrics must be abolished. Seats must be covered with smooth leather, to be washed at the end of every trip, and hard wood floors should prevail for the same reason. Curtain abominations must make way for screens of wood or leather. Invalids should be provided with separate compartments shut off from other portions of the sleeping car, and consumptive travellers should be provided with sputum cups, to be religiously used and frequently emptied." He adds that "it is not necessary to say that the sole and only danger arises from the sputum. When the patient learns that he protects himself in this way as much as others — protects himself from auto-infection, from the infection of the sound part of his own lungs—he will not protest against such measures."

The Areca Nut.

A paper on "The Narcotics and Spices of the East," recently read by Dr. Dymock before the Anthropological Society of Bombay, contains some interesting points about the areca-nut—the supari of the natives, and the betel nut of the Europeans. Few persons, says Dr. Dymock, have any idea of the consumption of the nut in India; but, as a matter of fact, 100,000,000 people eat it every day of the year. It is well known to the natives that the fresh nuts have intoxicating properties that produce giddiness, and that the nuts from certain trees possess these properties to an unusual extent, and even retain them when dry. These intoxicating properties are much diminished by heat, and as the nuts which possess them are apt to be mixed up with the common sort, many cautious people decline to use any except the red nuts of commerce, which have all undergone a process of cooking. Dr. Dymock inclines to the opinion that the original wild nut must have been an intoxicant, especially as the unripe nuts of the best trees produce slightly intoxi-

cating effects. The betel-leaf or pan, with which natives eat the areca-nut, is highly esteemed, and its thirteen properties are enumerated in the ancient books of the Hindus.

The Australian Meat Trade.

The Peninsular and Oriental Steam Navigation Company have had refrigerating chambers constructed in all their Australian trading steamers for the conveyance of frozen meat. Owing to the number of passengers conveyed by this line, the cargo space, even in their largest ships, is somewhat limited, but, besides a valuable general cargo, the *Oceana*, which lately arrived in London from Melbourne and Sydney, brought nearly 8,000 quarters of frozen beef. The imports of live and dead meat to London have been exceptionally heavy; in one week, over 3,000 head of cattle having been landed from various steamers, while the *Star of England* and *Rimutaka*, both from New Zealand, have arrived with nearly 80,000 carcases of mutton and 7,000 quarters of beef between them, besides other agricultural produce.

Quack Medicines.

Many of the leading journals either quoted or commented on Mr. Umney's presidential address to the British Pharmaceutical Conference. Naturally the remarks about patent medicines were especially attractive.

Says the *Newcastle Daily Chronicle*:—"The patent medicine, with its long-winded pretensions to relieve or cure nearly every disease under the sun, with its high-flown panegyric of its own virtues, has somehow a peculiar fascination for people. How to account for it we know not, except that it is in human nature to believe in miracles and attach faith to the marvellous." The same journal comments at considerable length on the danger of allowing these medicines to be sold indiscriminately, urging as the great point "the insidious and pernicious character of some of the patent medicines which find their way on shop-counters. What is to be thought, for instance, of the new palatable and stimulating lozenge which American ladies are said to be taking as a 'pick-me-up,' and which consists, it is stated, of a modicum of strychnine! Or, again, what about the arsenic lozenge which French ladies swallow with a view to encouraging *embonpoint*! Then, are there not several kinds of mysterious 'drops,' the sole purpose of which is, in plain English, to act as substitutes for alcohol, by satisfying the same craving, and producing the same results!

The *Graphic* says: "In Germany, where the State is the grandfather and grandmother of its people, no patent medicine may be sold unless its composition has been submitted to authority, and permission obtained for the sale. In view of the enormous porportions of the trade in England, some such modified regulation might well be introduced here, and this would go far to justify the at present unfounded confidence placed by the public in the patent-medicine stamp. And it would only be fair; for both the chemist and the medical man have to pass a fairly stiff examination before they can practise, whereas the patent-medicine vendor only needs a well-developed genius for advertisement, and a Government stamp, to make every man, woman, and child in the kingdom contribute something like tenpence a year all round to his support."

The *Pall Mall Gazette* tells the following anecdote:—"A vendor of patent medicines, who has made immense sums by dosing the public, told the clergyman who visited him upon his death-bed that there was one thought which gave him unspeakable consolation. 'You have no doubt heard,' he said, 'the unjust things that are said about my medicines!' The clergyman admitted that he had heard the precious drugs cynically described, and, with a reflection on the vitality of the ruling passion, listened for a glowing vindication of their merits. 'I tell you, sir,' exclaimed the patentee, with difficulty raising himself upon his elbow, 'I can lay my hand upon my heart and say that I believe them to be *absolutely harmless!*'" After pointing out that the same could not be said of all patent medicines, the *Pall Mall Gazette* adds: "Hydrate chloral, morphia, and opiates or narcotics, which in undisguised form would be labelled 'Poison,' are not metamorphosed into safe family medicines by sticking a shilling label on the top. The medical department of the Privy Council should look into this matter."

CORRESPONDENCE.

THE PRACTITIONER AND THE COUNCIL.

SIR,—I read Mr. Greenhalgh's letter last week with much pleasure, and hope it is a mark of a rising interest in the profession. We have too long accepted our representatives ready made for us by a small circle of men who go tramping around, either to get votes for themselves or their friends. It is quite time the country practitioner was on the Council in greater number, and I hope next election he will get his rights. In my district I know three men as good as any now on the Council, but they are not Fellows, and we cannot elect them. I hope no one among us will give a vote, next year, to any candidate who does not declare for the abolition of the Ninth Clause.—Yours obediently,

BOREAS.

THE FELLOWSHIP AND ITS EXAMINERS.

SIR,

At last meeting of Council when Mr. Cox was restored to the list of Examiners for the Fellowship on which he had been replaced by Professor Brown, something was said as to qualification. Mr. James Simpson explained Professor Brown's eligibility as being due to the fact that he was a teacher in a recognised Veterinary School at the time of the institution of the Fellowship Degree. Is this correct? The Charter of 1876 says on and after a certain date only Fellows shall act as Councilmen or Examiners. Does Professor Pritchard act as an Examiner for the Membership because he was once a teacher at a school? I am very much puzzled about this. Is there anything to prevent a Member being made an Examiner for the Fellowship? The original Charter says no teacher is to act as an Examiner, why does not this apply to the Fellowship? We may elect a Medical Man as an Examiner. Suppose Drs. Yeo, Sanderson or Heaton obtained the M.R.C.V.S. would they at once become ineligible or suppose a M.R.C.V.S. obtains a Medical Degree does he become eligible in spite of the Ninth Clause. Are we altogether consistent.—Yours, etc., IGNORAMUS.

MILK FEVER—TREATMENT.

SIR,

Allow me to ask, through the medium of *The Record*, if those practitioners who have given the sedative treatment in "Milk Fever," a trial (as recommended by Mr. T. M. McConnell) will kindly give their experience of the same.—Yours faithfully, W. RIDGMAN, M.R.C.V.S.

Liskeard, *Sept. 13th*, 1890.